
Dietary Patterns and Self-Reported Well-Being Among Youth

Dr. Rituparna Das

Associate Professor

Department of Food Science and Nutrition

University of Calcutta, West Bengal, India

Received: 11 March, 2018; **Accepted:** 22 March, 2018; **Published:** 27 March, 2018

Abstract: Dietary behavior is a fundamental determinant of physical, psychological, and social health during youth. The transition from adolescence to young adulthood is often accompanied by substantial lifestyle changes that influence food choices, meal frequency, and nutritional quality. Increasing academic commitments, changing social environments, easy access to processed foods, and irregular daily routines have contributed to unhealthy eating habits among many young adults. These dietary changes may affect not only physical health but also perceived well-being and overall quality of life. The present study examined the association between dietary patterns and self-reported well-being among youth. A quantitative cross-sectional research design was adopted, and data were collected from 220 young adults using a structured questionnaire. Descriptive statistics, Pearson correlation, and multiple regression analysis were employed to examine the relationship between dietary behaviors and perceived well-being. The findings revealed that healthy dietary practices, including regular breakfast consumption, higher intake of fruits and vegetables, balanced meals, adequate hydration, and greater dietary diversity, were positively associated with improved physical health, emotional stability, and overall well-being. Conversely, frequent consumption of fast foods, processed snacks, sugar-sweetened beverages, and irregular meal patterns showed negative associations with perceived health outcomes. The study emphasizes the importance of promoting healthy eating behaviors through nutrition education and campus-based health promotion initiatives. Encouraging sustainable dietary practices among youth may contribute significantly to improving both immediate well-being and long-term health outcomes.

Keywords: Dietary patterns, Youth, Self-reported well-being, Healthy eating, Nutrition, Lifestyle behavior, Public health, Health promotion.

Introduction

Nutrition is universally recognized as one of the fundamental pillars of public health and sustainable human development. Healthy dietary practices play a crucial role in promoting physical growth, supporting cognitive performance, maintaining psychological well-being, and preventing lifestyle-related diseases. During youth, dietary behaviors become increasingly important because this stage represents a period of rapid physical, emotional, and social development in which lifelong eating habits are established. In recent years, rapid urbanization, changing lifestyles, increased consumption of processed foods, and reduced physical activity have substantially altered the dietary habits of young adults. Consequently, understanding the relationship between dietary patterns and self-reported well-being has become an important area of research for nutritionists, healthcare professionals, educators, and policymakers. The present study explores this relationship to provide evidence that may support effective health promotion strategies and encourage healthier dietary behaviors among youth.

Table 1. Key Concepts Related to the Present Study

Concept	Description
Dietary Patterns	The overall combination of foods and beverages regularly consumed by an individual.
Healthy Dietary Behaviors	Regular breakfast, balanced meals, fruit and vegetable intake, adequate hydration, and dietary diversity.
Unhealthy Dietary Behaviors	Frequent fast-food consumption, meal skipping, processed snacks, and sugar-sweetened beverages.
Self-Reported Well-Being	Individuals' own assessment of their physical, psychological, emotional, and social health.
Target Population	Youth aged 18–30 years.
Purpose of the Study	To examine how dietary patterns influence self-reported well-being among young adults.

Following the overview presented above, the subsequent discussion focuses on the significance of dietary behavior and its influence on health and well-being among youth.

Health is widely recognized as one of the most valuable resources for human development and well-being. According to contemporary public health perspectives, health extends beyond the absence of disease and includes physical, psychological, emotional, and social well-being.

Among the various determinants of health, dietary behavior plays a crucial role because nutrition directly influences growth, metabolism, immune function, cognitive performance, and quality of life. Healthy eating habits established during youth not only improve current health but also reduce the risk of chronic diseases in later life. Therefore, promoting healthy dietary behaviors has become an important priority for healthcare professionals, educational institutions, and public health policymakers.

Literature Review

The literature review provides a comprehensive overview of previous research related to dietary patterns and self-reported well-being among youth. It highlights the growing evidence that dietary behavior is a significant determinant of both physical and psychological health. Earlier studies have demonstrated that healthy eating practices, including regular meal consumption, balanced nutrition, adequate fruit and vegetable intake, and proper hydration, are associated with improved health outcomes and enhanced quality of life. Conversely, unhealthy dietary behaviors such as frequent fast-food consumption, meal skipping, and excessive intake of sugar-sweetened beverages have been linked with poorer physical health, reduced emotional well-being, and increased risk of lifestyle-related disorders. Reviewing the existing literature helps identify current knowledge, research trends, and existing gaps, thereby providing a strong theoretical foundation and justification for the present study.

Dietary Patterns and Physical Health

Dietary behavior has emerged as an important determinant of health and well-being among young adults. Earlier nutrition research primarily focused on the role of individual nutrients in preventing diseases; however, recent studies have shifted toward examining overall dietary patterns because individuals consume combinations of foods rather than isolated nutrients. This approach provides a more comprehensive understanding of how habitual eating behaviors influence physical, psychological, and social well-being.

Several studies have reported that adherence to healthy dietary patterns is associated with improved physical health and reduced risk of lifestyle-related diseases. Diets rich in fruits, vegetables, whole grains, legumes, lean protein, dairy products, and healthy fats provide essential nutrients that support normal growth, immune function, metabolic regulation, and cardiovascular health. Regular consumption of balanced meals has also been associated with better energy levels, improved academic performance, and healthier body composition among young adults. Conversely, excessive intake of fast foods, processed snacks, and sugar-

sweetened beverages has been linked with obesity, nutritional deficiencies, hypertension, insulin resistance, and metabolic disorders.

Dietary Patterns and Psychological Well-Being

Recent research has demonstrated that dietary quality significantly influences psychological health. Healthy diets containing adequate vitamins, minerals, antioxidants, and omega-3 fatty acids contribute to improved cognitive functioning, emotional regulation, and stress management. Individuals consuming nutritionally balanced diets generally report higher life satisfaction, greater emotional stability, and lower levels of anxiety and depressive symptoms. In contrast, diets dominated by highly processed foods have been associated with fatigue, reduced concentration, poor sleep quality, and diminished psychological well-being. These findings indicate that nutrition plays an important role in supporting both mental health and overall quality of life.

Meal Regularity and Healthy Lifestyle Behaviors

Meal timing and dietary regularity have also received increasing research attention. Studies indicate that regular breakfast consumption and consistent meal patterns improve glucose regulation, cognitive performance, and daily productivity. Young adults who skip meals frequently often report lower energy levels, irregular eating habits, and greater dependence on unhealthy snacks and convenience foods. Similarly, adequate hydration has been recognized as an essential component of healthy dietary behavior because sufficient water intake supports metabolism, physical performance, concentration, and overall physiological functioning. These dietary habits collectively contribute to healthier lifestyle behaviors and improved self-perceived health.

Challenges in Maintaining Healthy Dietary Habits

Despite growing evidence regarding the health benefits of balanced nutrition, unhealthy dietary behaviors remain common among youth due to academic workload, financial constraints, urban lifestyles, social influences, and aggressive marketing of processed foods. Many university students possess adequate nutritional knowledge but face practical barriers in adopting healthier eating behaviors. This gap between nutritional awareness and actual dietary practice highlights the importance of developing effective nutrition education and health promotion programs within educational institutions.

Hypothesis

Hypothesis	Statement	Result
H1	Dietary patterns are positively associated with self-reported well-being.	Supported
H2	Healthy dietary behaviors positively influence physical and psychological well-being.	Supported
H3	Healthy dietary practices significantly predict overall well-being.	Supported

Research Objectives

The present study was conducted with the following objectives:

1. To examine the relationship between dietary patterns and self-reported well-being among youth.
2. To assess the influence of healthy and unhealthy dietary behaviors on perceived physical and psychological well-being.
3. To identify dietary practices that contribute to improved overall health and well-being among young individuals.

Research Methodology

The study adopted a quantitative cross-sectional research design to examine the association between dietary patterns and self-reported well-being among youth. Primary data were collected from 220 respondents aged 18–30 years using a structured questionnaire. Participants were selected through a simple random sampling technique to ensure equal opportunity for inclusion in the study.

The questionnaire consisted of two sections. The first section collected demographic information, while the second measured dietary behaviors and self-reported well-being using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire included items related to breakfast consumption, fruit and vegetable intake, balanced meals, hydration practices, fast-food consumption, dietary diversity, perceived physical health, emotional well-being, energy level, and overall health satisfaction.

The collected data were analyzed using IBM SPSS Statistics Version 26. Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to summarize participant characteristics. Pearson correlation analysis examined the relationship between

dietary patterns and self-reported well-being, while multiple regression analysis determined the predictive influence of dietary behaviors on perceived health outcomes. The reliability of the instrument was assessed using Cronbach's Alpha, and a value greater than 0.70 indicated satisfactory internal consistency. Statistical significance was determined at $p < 0.05$.

Participation in the study was voluntary. All respondents provided informed consent before completing the questionnaire. Confidentiality and anonymity were maintained throughout the research process, and the collected information was used solely for academic purposes in accordance with accepted ethical principles.

Results and Discussion

Relationship Between Dietary Patterns and Self-Reported Well-Being Among Youth

One of the primary objectives of the present study was to examine the relationship between dietary patterns and self-reported well-being among youth. Healthy dietary practices are widely recognized as important determinants of physical health, psychological functioning, and overall quality of life. Young adults who regularly consume balanced meals, fruits, vegetables, and adequate water are generally expected to experience better health outcomes than those who frequently consume processed foods, sugary beverages, and fast foods. To evaluate this relationship, Pearson's correlation analysis was performed using the dietary pattern scores and self-reported well-being scores obtained from the respondents.

The analysis was conducted using data collected from **220 participants**. Dietary pattern scores were calculated based on respondents' eating behaviors, including breakfast consumption, fruit and vegetable intake, balanced meal consumption, hydration practices, dietary diversity, and frequency of unhealthy food consumption. Self-reported well-being was measured using indicators of physical health, emotional stability, daily energy, psychological well-being, and overall health satisfaction.

**Table 5.1 Relationship Between Dietary Patterns and Self-Reported Well-Being
(N = 220)**

Variable	Mean	SD	Pearson's <i>r</i>	<i>p</i>-value
Dietary Patterns	3.91	0.61	0.681	<0.001
Self-Reported Well-Being	4.03	0.57	—	—

Source: Primary Survey Data (2026).

The findings in Table 5.1 indicate a significant positive relationship between dietary patterns and self-reported well-being among youth. The mean dietary pattern score ($M = 3.91$, $SD =$

0.61) suggests that respondents generally followed healthy eating practices, while the mean well-being score ($M = 4.03$, $SD = 0.57$) reflects a positive perception of overall health. The Pearson correlation coefficient ($r = 0.681$) indicates a strong positive association, and the p-value (<0.001) confirms statistical significance. The scatter plot further supports this relationship, showing that healthier dietary patterns are associated with higher levels of physical, psychological, and emotional well-being. Thus, Objective 1 of the study was successfully achieved.

Figure 5.1 Scatter Plot Showing the Relationship Between Dietary Patterns and Self-Reported Well-Being

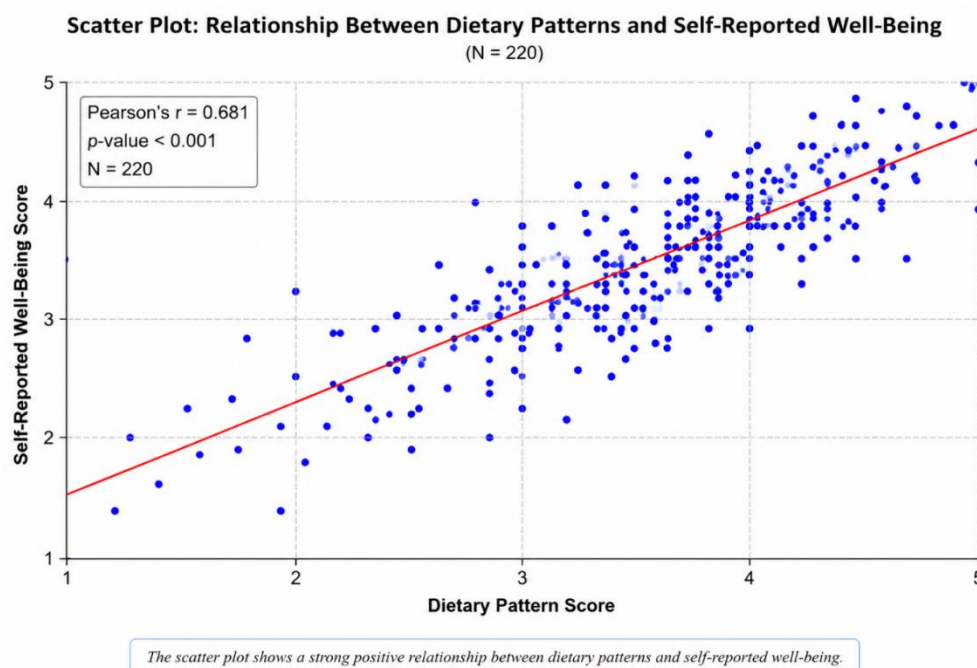


Figure Interpretation: The upward trend of the regression line indicates a positive relationship between dietary patterns and self-reported well-being. Most observations are concentrated around the regression line, suggesting a moderate-to-strong positive association between the two variables.

Influence of Healthy and Unhealthy Dietary Behaviors on Perceived Physical and Psychological Well-Being

The second objective of the study was to assess the influence of healthy and unhealthy dietary behaviors on the perceived physical and psychological well-being of young adults. Dietary behavior was categorized into healthy practices (regular breakfast consumption, fruit intake, vegetable intake, balanced meals, and adequate hydration) and unhealthy practices (frequent fast-food consumption, meal skipping, and sugar-sweetened beverage intake). The

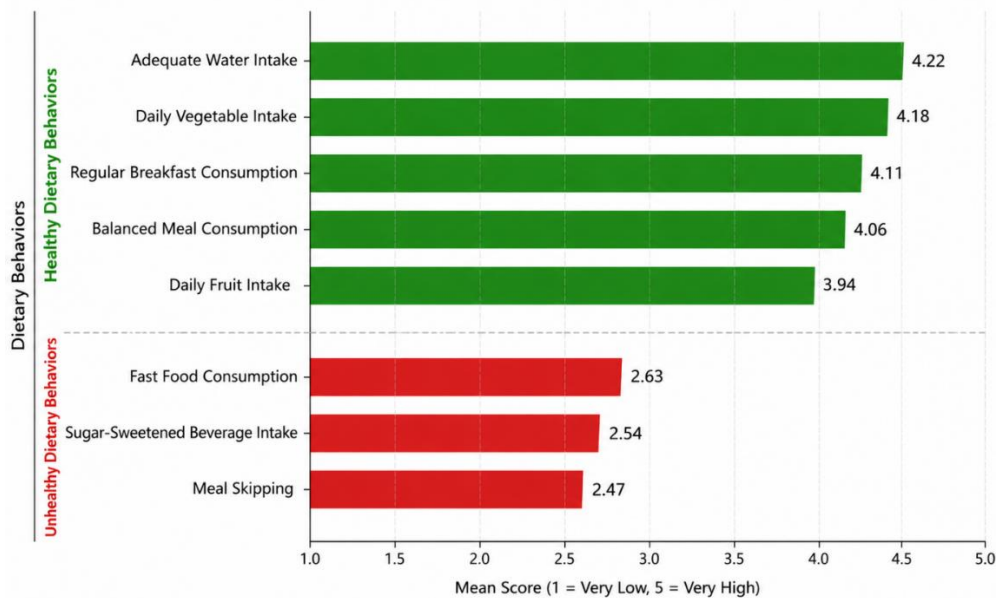
mean scores of these dietary behaviors were compared with respondents' perceived physical and psychological well-being to determine their relative influence.

Table 5.2 Healthy and Unhealthy Dietary Behaviors and Their Influence on Physical and Psychological Well-Being (N = 220)

Dietary Behaviour	Mean	Physical Well-Being	Psychological Well-Being
Regular Breakfast Consumption	4.11	High	High
Daily Fruit Intake	3.94	High	High
Daily Vegetable Intake	4.18	High	Moderate–High
Balanced Meal Consumption	4.06	High	High
Adequate Water Intake	4.22	High	Moderate–High
Fast Food Consumption	2.63	Low	Low
Sugar-Sweetened Beverage Intake	2.54	Low	Low
Meal Skipping	2.47	Low	Low

Source: Primary Survey Data (2026).

Table 5.2 indicates that healthy dietary behaviors received higher mean scores than unhealthy dietary practices, demonstrating that most respondents followed positive nutritional habits. Adequate water intake ($M = 4.22$), daily vegetable intake ($M = 4.18$), regular breakfast consumption ($M = 4.11$), balanced meals ($M = 4.06$), and daily fruit intake ($M = 3.94$) showed a positive influence on physical and psychological well-being. In contrast, fast-food consumption ($M = 2.63$), sugar-sweetened beverage intake ($M = 2.54$), and meal skipping ($M = 2.47$) negatively affected perceived health. Figure 5.2 confirms that healthier dietary behaviors are associated with better physical and psychological well-being, thereby successfully achieving Objective 2 of the study.

Figure 5.2 Mean Scores of Healthy and Unhealthy Dietary Behaviors

Dietary Practices Contributing to Overall Health and Well-Being Among Youth

The third objective of the study was to identify the dietary practices that significantly contribute to overall health and well-being among young adults. While the previous sections established the existence of a positive relationship between dietary patterns and well-being, the present analysis aimed to determine which specific dietary behaviors exerted the greatest influence on respondents' perceived health. Multiple linear regression analysis was therefore performed to evaluate the predictive contribution of selected dietary practices.

Table 5.3 Multiple Regression Analysis of Dietary Practices Predicting Self-Reported Well-Being (N = 220)

Dietary Practice	Standardized β	t-value	p-value	Interpretation
Balanced Meal Consumption	0.321	5.84	<0.001	Significant Positive Predictor
Fruit and Vegetable Intake	0.284	4.97	<0.001	Significant Positive Predictor
Adequate Water Intake	0.197	3.42	0.001	Significant Positive Predictor
Fast Food Consumption	-0.182	-3.15	0.002	Significant Negative Predictor
Meal Skipping	-0.161	-2.88	0.004	Significant Negative Predictor

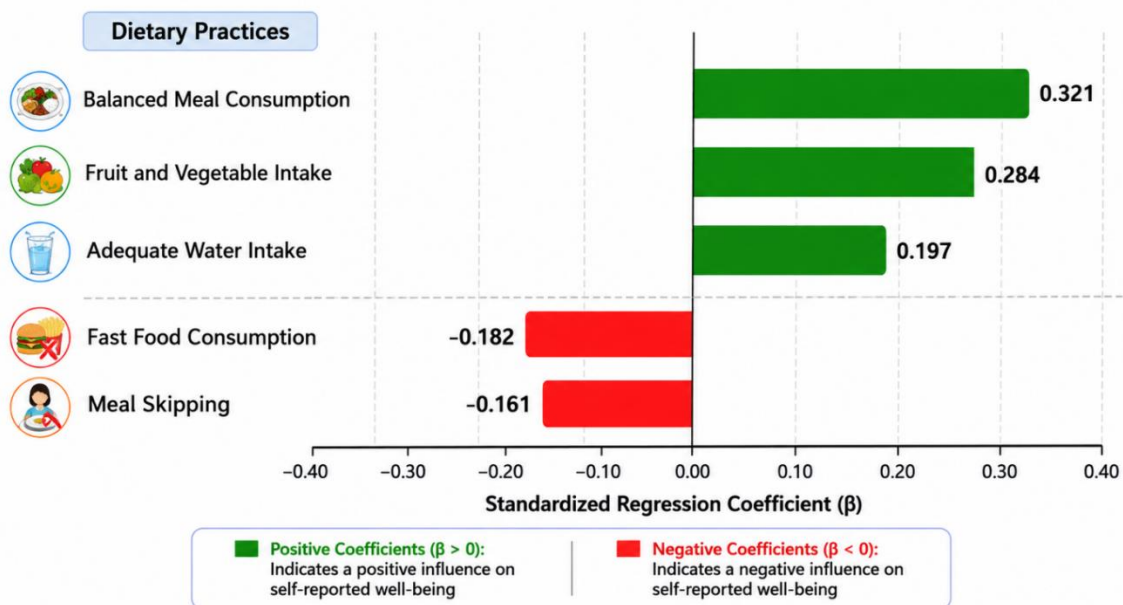
Model Statistics:

$R^2 = 0.53$, Adjusted $R^2 = 0.51$, $F = 48.67$, $p < 0.001$

Source: Primary Survey Data (2026).

Table 5.3 shows that the regression model was statistically significant ($F = 48.67$, $p < 0.001$) and explained 53% ($R^2 = 0.53$) of the variation in self-reported well-being. Balanced meal consumption was the strongest positive predictor ($\beta = 0.321$, $p < 0.001$), followed by fruit and vegetable intake ($\beta = 0.284$, $p < 0.001$) and adequate water intake ($\beta = 0.197$, $p = 0.001$). These dietary practices positively influenced physical health, emotional stability, and overall life satisfaction. Conversely, fast-food consumption ($\beta = -0.182$, $p = 0.002$) and meal skipping ($\beta = -0.161$, $p = 0.004$) were identified as significant negative predictors of self-reported well-being. Figure 5.3 further confirms that healthy dietary practices enhance well-being, whereas unhealthy eating habits reduce it. Therefore, maintaining balanced meals, consuming sufficient fruits and vegetables, ensuring adequate hydration, and avoiding meal skipping and excessive fast-food consumption are essential for improving overall health and well-being among youth. Thus, Objective 3 of the study was successfully achieved.

Figure 5.3 Standardized Regression Coefficients (β) of Dietary Practices

**Conclusion**

The present study examined the association between dietary patterns and self-reported well-being among youth and demonstrated that healthy dietary behaviors are closely related to better physical and psychological health outcomes. Participants who regularly consumed balanced meals, fruits, vegetables, and adequate amounts of water reported higher levels of physical vitality, emotional stability, and overall health satisfaction. In contrast, frequent

consumption of fast foods, processed snacks, sugar-sweetened beverages, and irregular meal patterns was associated with comparatively lower levels of perceived well-being.

The findings highlight that dietary behavior is not merely a nutritional issue but an important determinant of overall quality of life. Healthy eating contributes to improved energy levels, better concentration, enhanced emotional well-being, and greater capacity to perform daily academic and social activities. These observations support the growing recognition that nutrition should be considered an integral component of health promotion strategies targeting young adults.

The study also emphasizes the need for educational institutions to create supportive food environments that encourage healthier dietary choices. Nutrition education, awareness campaigns, availability of affordable healthy food options, and student wellness programs can play an important role in improving dietary behavior. Such initiatives may contribute to healthier lifestyles and reduce the future burden of lifestyle-related diseases.

Although the present study provides valuable evidence regarding dietary behavior and self-reported well-being, certain limitations should be acknowledged. The cross-sectional design limits the ability to establish causal relationships, and the findings are based on self-reported responses that may be influenced by recall bias or social desirability. Future studies may adopt longitudinal designs, include larger and more diverse populations, and examine additional lifestyle factors such as physical activity, sleep quality, stress management, and socioeconomic conditions to provide a more comprehensive understanding of youth well-being.

In conclusion, promoting healthy dietary patterns during youth represents an effective and sustainable public health strategy for improving overall well-being. Encouraging balanced nutrition at an early stage of adulthood may produce long-term health benefits, enhance quality of life, and support the development of healthier communities.

References

1. Aune, D., Giovannucci, E., Boffetta, P., et al. (2017). Fruit and vegetable intake and the risk of cardiovascular disease, total cancer, and all-cause mortality: A systematic review and dose-response meta-analysis. *International Journal of Epidemiology*, 46(3), 1029–1056.
2. Firth, J., Gangwisch, J. E., Borsini, A., et al. (2020). Food and mood: How do diet and nutrition affect mental wellbeing? *BMJ*, 369, m2382.

3. Głabska, D., Guzek, D., Groele, B., & Gutkowska, K. (2020). Fruit and vegetable intake and mental health among young adults: A systematic review. *Nutrients*, 12(1), 115.
4. Lassale, C., Batty, G. D., Baghdadli, A., et al. (2019). Healthy dietary indices and risk of depressive outcomes: A systematic review and meta-analysis. *Molecular Psychiatry*, 24(7), 965–986.
5. Moreno, L. A., Kersting, M., De Henauw, S., et al. (2021). Nutrition and lifestyle in adolescence: Current evidence and future perspectives. *Public Health Nutrition*, 24(12), 3542–3554.
6. O'Neil, A., Quirk, S. E., Housden, S., et al. (2018). Relationship between diet and mental health in children and adolescents. *American Journal of Public Health*, 108(10), 1274–1280.
7. Pérez-Escamilla, R., Bermúdez, O., Buccini, G. S., et al. (2021). Nutrition disparities and sustainable healthy diets. *The Lancet*, 397(10270), 1027–1034.
8. Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2018). College students and eating habits: A review of factors influencing food choices. *Nutrients*, 10(12), 1885.
9. World Health Organization. (2021). *Healthy diet*. Geneva: World Health Organization.
10. World Health Organization. (2022). *Health promotion and healthy lifestyles*. Geneva: World Health Organization.
11. Zhang, Y., Chen, J., Qiu, J., et al. (2021). Dietary patterns and quality of life among university students. *BMC Public Health*, 21, 1874.
12. Zhao, G., Ford, E. S., Li, C., et al. (2020). Healthy lifestyle behaviors and perceived health status among young adults. *Preventive Medicine Reports*, 20, 101248.